

CHAPTER 9 WOOD

SIFC-901 GENERAL

SIFC-901.1 Scope. The requirements of this chapter and IBC-1704.6 shall apply when construction includes wood building elements as listed in SIFC-302.6.

IBC-1704.6 Wood construction. Special inspections of the fabrication process of wood structural elements and assemblies shall be in accordance with Section 1704.2.

SIFC-901.2 Wood erection. Wood prefabricated structural elements shall be subject to special inspections during erection as required by SIFC-904.

SIFC-902 FABRICATION AND ERECTION DOCUMENTS

SIFC-902.1 Preparation of fabrication and erection documents A **RDP** with experience in the design of prefabricated wood elements and assemblies shall prepare, sign and seal fabrication and erection documents for prefabricated wood elements. The fabrication and erection documents shall include, but are not limited to: design drawings and calculations, connection details, supports, rigging requirements and lifting procedures, and erection bracing and details. Permanent bracing systems for lateral stability shall be detailed and included in the fabrication and erection documents. Details for welded or bolted connections shall clearly indicate the seismic-resisting elements of buildings of Seismic Design Category C, D, E or F. Details for bolted connections shall clearly indicate the amount of tensioning required and the ASTM specifications for the nuts, bolts and washers.

SIFC-902.2 Review and approval. The wood prefabricated elements' fabrication and erection documents shall be submitted to the **AR**, **SER** and Fairfax County for review and approval prior to wood prefabricated elements' fabrication and/or erection, as appropriate. After County review and approval, the **GC** shall ensure that County-approved fabrication and erection documents are available for use on the job site. County-approved documents shall be used by the **SIER** to conduct special inspections during construction.

SIFC-902.2.1 AR and SER review and approval. The **AR** and the **SER** shall review the fabrication and erection documents for compliance with the architectural and structural design of the building and the County-approved construction documents. For prefabricated wood trusses, the **AR/SER** shall also submit a certification of compliance to the **BPRD**.

SIFC-902.2.2 County approval.

a. Structural glue-laminated members and sandwich panels. The **GC** shall submit two sets of **AR/SER**-approved fabrication and erection documents to **FCCSS** for approval. After County review and approval, **FCCSS** will return one set of County-approved fabrication and erection documents for use on the job site.

b. Prefabricated trusses. The **GC** shall submit three sets of **AR/SER**-approved fabrication and erection documents to **BPRD** for approval. At least one set shall bear the

original seal and signature of the **RDP** responsible for truss design. After County review and approval, **BPRD** will retain one set of County-approved fabrication and erection documents and return the others for use on the job site.

c. Prefabricated wood I-joists. County approval is not required for wood I-joists. **SER**-approved fabrication and erection documents shall be available for use on the job site.

SIFC-903 INSPECTION OF WOOD FABRICATORS

SIFC-903.1 Wood fabricators. The **SIER** shall provide special inspection of the wood fabricator and fabrication procedures, and of the fabricated items, as required by IBC-1704.2. Glue-laminated members and sandwich panels shall bear the mark of an approved agency.

a. Certification. The fabricator may demonstrate to the **SIER** that the requirements of IBC-1704.2 have been met by furnishing evidence of compliance with the Wood Truss Council of America's Quality Control Program, or its equivalent.

b. Fabricator approval. The **SIER** shall verify in writing to **FCCSS** that the fabricator is properly implementing the fabrication and quality control procedures outlined above. Verification may be on a job basis or by inspection within the previous twelve months.

c. Certificate of compliance. At the completion of fabrication, the fabricator shall submit a certificate of compliance to **FCCSS**.

SIFC-904 INSPECTION OF WOOD ELEMENTS

SIFC-904.1 Erection. The **SIER** shall perform special inspections of wood building elements during erection as required by the VUSBC for conformance with County-approved documents. The **SIER** shall verify the following:

SIFC-904.2 Connections. All connections of the seismic-resisting elements of buildings assigned to Seismic Category C, D, E, or F are in accordance with County-approved documents and applicable sections of the IBC and VUSBC. Special inspections shall include nailing, bolting, structural gluing or other fastening of the wood elements of the structural seismic-resisting system of all buildings, regardless of height, assigned to Seismic Design Category C, D, E or F, as required by IBC-1707.3.

SIFC-905 COMPLETION OF WOOD CONSTRUCTION

Upon completion of wood construction, including connections, the **SIER** shall, after review and approval by the **SER**, submit a completion letter to **FCCSS** and shall indicate the date of completion on the final report of special inspections.